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Boys are victims too? Sexual dating violence and injury among high-risk youth[☆]

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Abstract

Objective—Prior research with youth exposed to violence suggests that, in this high-risk population, boys may be victims of sexual teen dating violence (TDV) and injury as frequently as girls. We sought to replicate these findings with a demographically similar sample and to determine whether the findings could be attributed the high-risk nature of the sample by assessing the impact of violence exposure on sex differences.

Methods—A cross-sectional sample of 2577 youth (ages 11–18, $M = 15.4$, $SD = 1.9$, 52% female, 25% Caucasian) collected in 2004 from a high-risk community reported on history of dating and exposure to multiple forms of violence. We conducted moderation analyses to test whether polyvictimization (PV) and age moderated the potential sex differences in perpetration and victimization of sexual TDV and injury.

Results—No significant sex differences in victimization were observed regardless of degree of PV. Boys reported more frequent sexual TDV and injury perpetration relative to girls, but only for youth reporting high degree of PV. There were no sex differences in perpetration among low PV youth.

Conclusions—These findings suggest boys from high-risk communities may disproportionately perpetrate severe acts of TDV but at this early age they are equally likely to be victimized. To interrupt the cycle of violence victimization and perpetration, comprehensive violence prevention interventions targeting high-risk youth should be implemented at schools, in homes, and in the community; and they should recognize the potential for girls *and* boys to be victims of even the most severe forms of TDV.

Keywords

Teen dating violence; Polyvictimization; Violence victimization; Violence perpetration; Sexual violence; Injury

[☆]The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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1. Introduction

Intimate partner violence (IPV) and its suspected precursor, teen dating violence (TDV), are significant public health problems that can have multiple deleterious outcomes ranging from physical problems such as gastrointestinal disorders and pelvic inflammatory disease, to mental health and behavioral implications, such as, anxiety, depression, substance abuse, risky sexual behavior, and suicidal ideation (Coker et al., 2000; Walsh et al., 2015). Moreover, experiencing relationship violence during adolescence may predispose youth to future violent relationships (Smith et al., 2003). Considering the potential lasting consequences of relationship violence at this early age (Exner-Cortens et al., 2013; Foshee et al., 2013) and the relatively early age youth begin to date and become sexually active (Cascardi and Avery-Leaf, 2015; Markham et al., 2009), it is critical to understand the dynamics of dating violence among adolescents so that we ultimately may prevent a life-course trajectory of adverse health outcomes.

While some have framed IPV/TDV as a primarily male-perpetrated and female-victimized phenomenon (DeKeseredy, 2006; Dobash et al., 1992), others have presented evidence that females too, are frequently perpetrators of IPV/TDV, and males, their victims (Straus, 2008). In reviewing the gender asymmetry debate, Hamby (2009) highlights the discrepant findings pertaining to women's role in IPV, with estimates ranging from 10% to 50% of all IPV perpetrated by women. Moreover, these rates may differ by age of the population under investigation. Among adults, men appear to perpetrate more than women, while in adolescent populations, the conclusion is opposite – with girls perpetrating TDV as much as, or more than, boys (Foshee et al., 1996; Hamby and Turner, 2013; Orpinas et al., 2013; Swahn et al., 2008). These differences may be due to characteristics of the developmental periods (Schwartz et al., 2005; Waterman, 1982); or alternatively, inconsistencies in measurement and failure to account for the severity, circumstances, willingness to disclose perpetration, and outcomes of the violence may explain these largely discrepant findings. For example, using data from a nationally representative sample, Hamby and Turner (2013) found that when TDV was defined as “ANY” physical force, the victimization rate was higher among boys than girls. However, when the definition was more exclusive counting only injurious or fear-inducing acts of violence, the victimization rate for girls was double that of boys. This is consistent with data from nationally representative samples of adults indicating women are more likely to be afraid and more likely to be injured (Black et al., 2011). Additionally, a generally stable finding across samples is that girls and women are more frequently victims of sexual violence by a male intimate partner than are males by a female intimate partner (Black et al., 2011; Fernández-González et al., 2014; Hamby and Turner, 2013). However, in a test of the moderating effect of age on biological sex differences in TDV, Reidy et al. (2016) found that boys in early adolescence reported more sexual and injury victimization than girls of a similar age. By age 17, when physical differences would be expected to favor boys, there were no differences in rates of injury victimization, indicating that boys were injured as frequently by girls as were girls by boys. Likewise, at age 17 there were no significant differences in sexual violence victimization between sexes, although, a trend toward significance was identified wherein girls reported more victimization (Reidy et al., 2016).

These findings run counter to expectation based on evidence from large national samples and meta-analyses which generally indicate males perpetrate more sexual violence and injury toward a female intimate partner than do females against their male partners (Archer, 2000; Hamby and Turner, 2013). The authors speculated these discrepant findings may be due, in part, to the nature of the sample and the definition of measurement. The measurement of sexual TDV in this study comprised items reflecting sexually coercive behaviors (e.g., pressuring partner to have sex, unwanted touching, spreading sexual rumors) rather than acts of physical force to penetrate or complete a sexual act (Reidy et al., 2016). Thus, it seems feasible that assessment of direct physical or forced sexual contact would yield victimization rates higher for girls than boys. Additionally, the authors note that the high-risk nature of the sample (i.e., youth with a history of violence exposure in their homes or community), may have influenced the outcomes (Reidy et al., 2016). It is possible prior exposure to violence may engender a phenomenon wherein girls are just as likely as boys to perpetrate severe forms of violence in dating relationships and therefore boys in this population are equally at risk of significant injury.

Notably, most studies to date have examined TDV rates and sex differences among general adolescent populations (Niolon et al., 2015). However, those who witness or experience violence in their home or community are at heightened risk of being victims of and/ or perpetrating multiple types of violence including TDV (Baskin and Sommers, 2014; Niolon et al., 2015; Turner et al., 2016). Baskin and Sommers (2014) found that over time, youth who had more exposure to community violence were more likely to perpetrate violence, and continued to engage in violent behavior as they got older. Turner et al. (2016) found adolescents who were victims of violence across multiple settings, termed polyvictimization (PV), had significantly higher trauma symptoms (i.e., anger, depression, anxiety, dissociation, and posttraumatic stress) and violence involvement than those who were victimized in only one setting. Indeed, several studies have suggested girls from high-risk populations may commit violence and aggression in and out of intimate relationships at rates and severity commensurate to boys (Niolon et al., 2015; Schaeffer et al., 2006). Thus, there is reason to suspect youth exposed to violence may represent a unique high-risk population demonstrating rates of TDV that differ from the general population, and among this population, boys may be equally at risk for sexual and injurious forms of TDV.

Given these considerations, it is currently unclear if Reidy et al.'s findings were due to the high-risk nature of their sample (i.e., youth exposed to violence) and the nature of their measurement (i.e., sexual TDV). Therefore, the purpose of the present study is to replicate and expand upon these findings. In doing so, we assess sex differences in sexual TDV and injury in a demographically similar sample of youth who vary in their degree of risk conferred by violence exposure. If the findings of Reidy et al. (2016) are due to the specialized nature of the sample (i.e., youth exposed to violence), then we would expect to see a pattern wherein sex differences in sexual TDV and injury dissipate as the degree of violence exposure increases. Accordingly, we test the moderating effect of risk (as determined by degree of violence exposure) on the relationship among biological sex, age, and TDV. Additionally, Reidy et al. (2016) assessed sexual TDV using a measurement of sexual coercion, but the present study will test whether sex differences exist when measuring sexual violence in a more severe form, forced sexual behavior.

2. Methods

Data for the present sample were taken from the “Youth Violence Survey: Linkages among Different forms of Violence” administered in 2004 (Swahn et al., 2008; Swahn and Bossarte, 2009). Notably, the community from which these youth were sampled is high-risk, as it ranked among the highest 10 U.S. cities for serious crime, the highest 15 in single-parent families, the highest 25 in poverty, and the highest 35 in unemployment (Swahn and Bossarte, 2009). These data are ideal for the present investigation because they contain information about the number of types of violence exposure (e.g., community violence, sexual violence, violence in the home) which allows us to compare low-risk youth (i.e., no violence exposure) to high-risk youth (i.e., multiple violence exposures). Moreover, this sample has a diverse ethnic composition similar to that of Reidy et al. (Reidy et al., 2016; Swahn and Bossarte, 2009).

Data were collected from all public school students enrolled in grades 7, 9, and 11 and 12 combined in a school district comprised of 16 schools located in the Northeast United States. All students under 18 years of age required written parental permission and student assent to participate, and students 18 years or older provided written consent prior to participating in the study (participation rate = 81%). Only data from students reporting a dating history during the preceding 12 months were analyzed in the present study. A total of 2888 students endorsed a dating history in the preceding 12 months. Of these, 294 students were missing PV data, and 17 students were missing age and/or biological sex data. The final analytic sample comprised 2577 students. Participant ages ranged from 11 to 18 ($M = 15.38$, $SD = 1.9$), and the majority were ethnic/racial minorities (43% Hispanic, 22% African American). See Table 1 for demographic information. The study received Institutional Review Board approval from the Centers for Disease Control and Prevention. A full description of procedures and methods is reported previously (Swahn and Bossarte, 2009).

2.1. Measures

2.1.1. Demographics—Students responded to demographic questions including age, race/ethnicity, and gender.

2.1.2. Polyvictimization—PV was measured by exposure to four types of violence: community, IPV, physical child abuse (PCA), and sexual violence. Exposure to community violence was measured with two items, “I have seen somebody being beaten up” and “I have seen somebody get stabbed or shot.” Exposure to IPV was measured using one item, “Before you were 10 years old, did you ever see or hear one of your parents or guardians being hit, slapped, punched, shoved, kicked or otherwise physically hurt by their spouse or partner?” PCA was measured using the single item, “Before you were 10 years old, did you ever have injuries, such as bruises, cuts, or broken bones, as a result of being spanked, struck, or shoved by your parents or guardians or their partners?” Sexual violence was measured using one item, “Before you were 10 years old, did someone ever force you to have sex or to do something sexual that you did not want to?” Response options were “yes” or “no”. APV score ranging from 0 to 4 was derived by summing the four different types of violence exposures.

2.1.3. Sexual perpetration and victimization—Sexual perpetration was measured with a single item, “Thinking about the last 12 months, how often have you done the following things to someone you have been on a date with?: Forced them to have sex or to do something sexual that they did not want to do.” Sexual victimization was measured with a single item, “Thinking about the last 12 months, how often has someone you have been on a date with done the following things to you?: Forced me to have sex or to do something sexual that I did not want to do.” Response options for both victimization and perpetration ranged from 0 (never) to 4 (10 or more times).

2.1.4. Injury perpetration and victimization—Injury perpetration was measured with a single item, “Thinking about the last 12 months, how often have you done the following things to someone you have been on a date with?: Hurt them badly enough to need bandages or care from a doctor or nurse.” Response options ranged from 0 (never) to 4 (10 or more times). Injury victimization was measured with a single item, “Thinking about the last 12 months, how often has someone you have been on a date with done the following things to you?: Hurt me badly enough to need bandages or care from a doctor or nurse.” Response options ranged from 0 (never) to 4 (10 or more times).

3. Analytic strategy

All analyses were conducted using Mplus version 7.3. Due to clustering of data within schools, we controlled for nesting effects using robust maximum likelihood estimation (i.e., sandwich estimator). For all criterion variables, we computed Ordinary least squares multiple regression equations with the 3-way interaction term of age * sex * PV, the three lower order interaction terms, and main effects of the three predictor variables. All variables were centered to have a mean of 0 and variance of 1 to reduce multicollinearity (Aiken and West, 1991). When interactions proved significant, we explicated by graphing them at -1 standard deviation below and $+1$ standard deviation above the mean value of the moderator variable.

4. Results

The mean number of violence exposure types (i.e., PV) was 1.5 with a standard deviation of 1.0. The number of students endorsing each type of violence exposure are presented in Table 1. Of the 2577 students, 397 (15.4%) reported no violence exposure, 1055 (40.9%) students reported being exposed to one form of violence, 703 (27.3%) students endorsed 2 forms of violence exposure, 338 (13.1%) endorsed 3 forms, and 84 (3.3%) reported all 4 types of violence exposure. In sum, 43.7% of the sample reported polyvictimization (i.e., exposure to 2 or more types of violence). Table 2 presents the bivariate associations between each of the predictor and criterion variables. All effect sizes are small ranging from .00 to .18.

In conducting moderation analyses, we first computed regression equations for perpetration outcomes. Results for sexual and injury perpetration were highly similar: neither evinced a significant three-way interaction, but both outcomes demonstrated significant interactions between age and PV and sex and PV, see Table 3. Explication of these interactions indicated that PV was more strongly associated with sexual and injury perpetration among boys

compared to girls (Figs. 1B and 2B) and among younger students (i.e., age 13.5) relative to older students (i.e., age 17.3; Figs. 1A and 2A).

When we assessed victimization outcomes, there were no significant interactions at either level. There were no main effects of age for either outcome but there was a positive effect of PV on both sexual and injury victimization. Sex demonstrated a small negative association to injury victimization with boys reporting more victimization than girls. There were no sex differences for sexual victimization, see Table 3.

5. Discussion

The goal of the present study was to expand upon prior research (Reidy et al., 2016) finding that in early adolescence, boys were more frequently victims of sexual coercion and injury than were girls, and in late adolescence were injured and sexually coerced by dating partners as frequently as their female counterparts. These authors suggested that the findings may have been due to the high-risk nature of the sample, namely, youth who had been exposed to violence (Reidy et al., 2016). Thus, in the present study we assessed whether the degree of violence exposure (i.e., PV) influenced sex differences in sexual TDV and injury in a demographically similar sample of youth. In doing so, we tested the moderating effect of PV on the relationship among biological sex, age, and TDV (i.e., a three-way interaction).

Our results partially confirm the findings of Reidy et al. (2016). There were no significant three-way interactions for perpetration or victimization. However, a consistent set of findings for sexual TDV perpetration and injury perpetration indicated sex differences existed only among high PV youth, with boys reporting more frequent perpetration. Additionally, PV was most strongly associated with sexual TDV perpetration and injury perpetration among younger adolescents. We found no interaction between age and the effect of biological sex, meaning that sex differences (or lack thereof) in perpetration were consistent from age 11 to 18 in the present sample. Further, contrary to our expectation that there would be no sex differences among high PV youth, we found sex differences in perpetration existed *only* among high PV youth while rates of perpetration were comparable among low PV youth.

When examining victimization outcomes, sex differences were not moderated by age or degree of PV. In fact, only a main effect of PV was found for sexual TDV victimization, indicating the more types of violence exposure youth reported, the more likely they were to have been a victim of sexual TDV. And, there was no effect of age or biological sex on this outcome. In other words, boys were forced to engage in a sexual act as frequently as girls and this was as true for the youngest boys as it was the oldest. This finding is generally consistent with Reidy et al. (2016), as are the findings pertaining to injury victimization. In fact, there was actually a small association between biological sex and injury victimization indicating boys reported more frequent injury victimization than did girls. However, given the magnitude of this effect was quite small ($\beta = -.047$), the difference may be of more statistical than clinical significance.

Interestingly, another recent study of high-risk, low-income, urban, minority youth demonstrated parity in the rates of injury perpetration and victimization for boys and girls (Cascardi and Avery-Leaf, 2015). Admittedly, this sample was significantly younger (grades 6–8) than the present sample, which could suggest the severity of violence and physical disparity between the two sexes had not yet reached a level sufficient to discriminate rates of injury. Nonetheless, the rates of injury identified were comparable to prior research (Hamby and Turner, 2013; Reidy et al., 2016). Although these authors (Cascardi and Avery-Leaf, 2015) did not assess historical exposure to violence, they did highlight the high rates of violent crime in the schools and communities, and violence exposure had been reported to be high in similar surrounding urban neighborhoods suggesting their high-risk youth may likely have been exposed to multiple forms of violence (Cascardi and Avery-Leaf, 2015; McDonald et al., 2011).

It is possible that gender parity in injury and sexual TDV victimization among these high-risk populations is due to a gendered effect in girls' selective mating in response to chronic stress. Specifically, girls experiencing turbulence and emotional stress associated with early life adversities (e.g., violence exposure) are less likely to rely on same-sex peers as sources of emotional support and more likely to initiate romantic relationships at a premature age with older, antisocial males (Cauffman et al., 2008; Kerig, 2014). These relationships tend to be marked by emotional volatility and TDV; and these older, antisocial males are agonists who encourage and exacerbate the delinquent and violent behavior of their younger female partners (Cauffman et al., 2008; Kerig, 2014). In other words, girls, but not boys, exposed to adverse experiences in childhood such as violence may be more likely to self-select into romantic relationships that nurture their violence. Thus, these girls may be more likely to be violent in dating relationships; their violence would onset earlier; and consequently, they would be more likely to progress to perpetrating more severe forms of violence that may include sexual violence and acts that result in injury.

Of course, our data suggest that violence exposure, while relevant to understanding TDV, does not explain the commensurate frequency of boys' victimization on these more serious indices of TDV. Notably, the community from which these youth were sampled was of particularly high-risk status in terms of having high rates of poverty, unemployment, crime, and single-parent households (Swahn and Bossarte, 2009). Thus, it seems feasible, based on the level of community risk, that even those youth with no history of violence exposure were exposed to various adverse experiences resulting in chronic stressors that engendered risk for violence. And, in fact, the relatively small effect sizes of PV indicated violence exposure was only minimally associated with increased risk, consequently suggesting a multitude of other factors contributed equal or greater risk for violence in the present sample.

That being said, PV was associated with all observed outcomes and positively correlated with boys' perpetration of both sexual and injurious TDV. Preventing boys' perpetration of TDV has important health implications not just for their victims, but for the perpetrating boys themselves. Youth who commit violence tend to have worse educational attainment, criminal justice outcomes, and employment status (Apel and Sweeten, 2010; Tanner et al., 1999). These factors are key determinants of health (CDC, 2013). As such, preventing boys' violence perpetration may influence their social determinants of health and improve their

long-term health outcomes. In a related vein, beyond preventing the direct physical and psychological consequences of victimization, understanding boys' victimization may likewise help to prevent future perpetration: it is possible that boys' TDV victimization experiences at early ages contribute to the development of maladaptive attitudes about the propriety of physical and sexual violence in dating relationships. In fact, a recent multinational study found that boys who were victims of sexual violence were more likely condone violence against a female partner (Sumner et al., 2016). Attitudes condoning violence are consistently associated with boys' TDV perpetration (Foshee et al., 2001; Reyes et al., 2016). Similarly, given pervasive hegemonic gender socialization messages in our culture mandating boys and men to be strong, dominant, and superior to women, it is likely victimization by girls could fuel anti-feminine attitudes and hostility thereby precipitating future IPV/TDV by males as a means of maintaining dominance over women (Bosson et al., 2015; Malamuth et al., 1995; Smith et al., 2015). Thus, the relatively small sex differences in perpetration identified in the present sample may grow with age increasing the disparity in perpetration as boys physically mature into adulthood. In turn, as these disparities in perpetration grow, sex differences in the frequency of victimization may develop. Accordingly, sex differences in victimization among these high-risk individuals may not emerge until adulthood when they are fully physically matured (O'Leary and Slep, 2012). For example, Fernández-González et al. (2014) found that injury rates among boys were commensurate with girls and peaked at age 17 before dropping significantly during ages 18–20. However, rates of injury for girls continued to increase through age 20.

The present findings suggest, for boys in particular, developing tailored interventions that target youth who are exposed to multiple forms of violence in their homes and communities may be of benefit (given that high PV boys perpetrated more frequently). For example, the “*Moms and Teens for Safe Dates*” program was designed specifically for adolescents who had witnessed their mother's IPV victimization (Foshee et al., 2015). The authors found program effects on physical TDV victimization only for adolescents with higher levels of exposure to IPV, but not lower levels of exposure. Unfortunately, the program did not affect sexual violence perpetration or victimization (Foshee et al., 2015). Pertinently, a recent evaluation of the “*Expect Respect Support Groups*” intervention - a TDV prevention program developed for youth exposed to violence in the home, school, and community-reported reductions in boys' victimization and perpetration of sexual TDV. Moreover, the authors found that this intervention was most effective with the boys who reported the most violence at the intervention onset (Reidy et al., 2017). This finding is significant because it suggests boys' perpetration of sexual TDV may be tied to their experiences of victimization. In a related vein, the universal TDV prevention program “*Fourth R*” (Wolfe et al., 2003) has been shown to buffer the cumulative potentiating effect of child maltreatment (i.e., neglect, emotional abuse, physical abuse, sexual abuse, and witnessing IPV) on violent delinquency (Crooks et al., 2011).

Several limitations of this research must be acknowledged. First, these data were collected more than a decade ago via self-report, which could potentially introduce respondent bias or bias due to secular change. Notably, rates of TDV, sexual violence, and injury among adolescents have been generally stable over the past two decades (Rothman and Xuan, 2014; CDC, 2016) suggesting the propriety of these data to examine sex differences in rates of

TDV. Nevertheless, motives and cultural influences for such behavior may have changed over time. Additionally, given the cross-sectional nature of this study, we cannot determine temporality and consequently, cannot untangle the nature of association between victimization and perpetration. This hinders our ability to ascertain whether perpetration and/or victimization are a result of PV exposure, or victims/perpetrators are at increased risk of experiencing subsequent PV. In a related vein, the measure of PV included three questions that assessed exposure to parental IPV, physical, and sexual abuse prior to age 10, and two questions that assessed exposure to community violence at any point in their lives. As such, the PV construct likely underrepresents youth who initially witnessed parental IPV or experienced physical or sexual victimization after age 10. Further, for many youth, the risk of initial exposure to violence does not end at age 10, and exposure during pre-adolescence and the teenage years likely continues to impact behavioral and health outcomes overtime; thus, the effect of PV exposure after age 10 on subsequent violent outcomes warrants further study. Moreover, PV was measured using a summed measure consisting of the aforementioned disparate forms of violence exposure. The findings may potentially differ when assessing each type of exposure independently. Finally, this measure of PV does not capture the frequency with which youth were exposed to each type of violence. It is entirely possible (and likely) the cumulative effect of repeated exposures to a single form of violence would have greater impact on a child than experiencing a single incident of violence for multiple forms of violence (Baskin and Sommers, 2014). Johnson and Leone (2005) found that those who had been repeatedly exposed to violence over their lifetime experienced more serious consequences than those who had only experienced an isolated incident.

Nevertheless, our findings contribute to the literature as they highlight the need for increased attention to youth from high-risk populations. Interventions for these high-risk youth should be multi-pronged, aiming to prevent violence at schools, in homes, and in the community; and they should recognize the potential for boys and girls both to be perpetrators and victims of even the most severe forms of TDV (O'Leary and Slep, 2012). Interventions targeting this population in multiple ecological settings may decrease TDV perpetration and victimization rates during adolescence and set youth on a positive trajectory, reducing the likelihood that they become victims and perpetrators of IPV and suffer related adverse health outcomes later in life. This may be particularly pertinent for boys, given the disproportionate rate of men's perpetration of severe forms of relationship violence in adulthood (Archer, 2000; O'Leary and Slep, 2012).

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References

- Aiken, L.S., West, S.G. Multiple Regression: Testing and Interpreting Interactions. Sage; Newbury Park, CA: 1991.
- Apel R, Sweeten G. The impact of incarceration on employment during the transition to adulthood. *Soc Probl.* 2010; 57(3):448–479.
- Archer J. Sex differences in aggression between heterosexual partners: a meta-analytic review. *Psychol Bull.* 2000; 126:651–680. [PubMed: 10989615]

- Baskin D, Sommers I. Exposure to community violence and trajectories of violent offending. *Youth Violence Juvenile Justice*. 2014; 12(4):367–385.
- Black, MC., Basile, KC., Breiding, MJ., Smith, SG., Walters, ML., Merrick, MT., Chen, J., Stevens, MR. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report National Center for Injury Prevention and Control. Centers for Disease Control and Prevention; Atlanta, GA: 2011.
- Bosson JK, Parrott DJ, Swan SC, Kuchynka SL, Schramm AT. A dangerous boomerang: injunctive norms, hostile sexist attitudes, and male to female sexual aggression. *Aggress Behav*. 2015; 41:580–593. [PubMed: 26174353]
- Cascardi M, Avery-Leaf S. Gender differences in dating aggression and victimization among low-income urban middle-school students. *Partner Abuse*. 2015; 6:383–402.
- Cauffman E, Farruggia SP, Goldweber A. Bad boys or poor parents: relations to female juvenile delinquency. *J Res Adolesc*. 2008; 18:699–712. [PubMed: 19920878]
- Centers for Disease Control Prevention. CDC health disparities and inequalities report — United States, 2013. *MMWR*. 2013; 62(Suppl. 3):1–186.
- Centers for Disease Control and Prevention. Division of Adolescent and School Health, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; Atlanta, GA: 2016. Trends in the Prevalence of Behaviors that Contribute to Violence National YRBS: 1991–2015. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2015_us_violence_trend_yrbs.pdf
- Coker AL, Smith PH, Bethea L, King MR, McKeown RE. Physical health consequences of physical and psychological intimate partner violence. *Arch Fam Med*. 2000; 9(5):451–457. [PubMed: 10810951]
- Crooks CV, Scott K, Ellis W, Wolfe DA. Impact of a universal school-based violence prevention program on violent delinquency: distinctive benefits for youth with maltreatment histories. *Child Abuse Negl*. 2011; 35(6):393–400. [PubMed: 21652072]
- DeKeseredy WS. Future directions. *Violence against Women*. 2006; 12:1078–1085. [PubMed: 17043369]
- Dobash RP, Dobash RE, Wilson M, Daly M. The myth of sexual symmetry in marital violence. *Soc Probl*. 1992; 39:71–91.
- Exner-Cortens D, Eckenrode J, Rothman E. Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics*. 2013; 71:71–78.
- Fernández-González L, O'Leary KD, Muñoz-Rivas MJ. Age-related changes in dating aggression in Spanish high-school students. *Journal of Interpersonal Violence*. 2014; 29:1132–1152. [PubMed: 24203984]
- Foshee VA, Linder GF, Bauman KE, Langwick SA, Arriaga XB, Heath JL, McMahon PM, Bangdiwala S. The safe dates project: theoretical basis, evaluation design, and selected baseline findings. *Am J Prev Med*. 1996; 12:39–47.
- Foshee V, Linder F, MacDougall J, Bangdiwala S. Gender differences in the longitudinal predictors of adolescent dating violence. *Prev Med*. 2001; 32:128–141. [PubMed: 11162338]
- Foshee VA, Reyes HL, Gottfredson NC, Chang LY, Ennett ST. A longitudinal examination of psychological, behavioral, academic, and relationship consequences of dating abuse victimization among a primarily rural sample of adolescents. *J Adolesc Health*. 2013; 53(6):723–729. [PubMed: 23910572]
- Foshee VA, Benefield T, Dixon KS, et al. The effects of moms and teens for safe dates: a dating abuse prevention program for adolescents exposed to domestic violence. *J Youth Adolesc*. 2015; 44(5): 995–1010. [PubMed: 25776110]
- Hamby S. The gender debate about intimate partner violence: solutions and dead ends. *Psychological Trauma, Theory, Research, Practice, & Policy*. 2009; 1:24–34.
- Hamby S, Turner H. Measuring teen dating violence in males and females: insights from the National Survey of Children's exposure to violence. *Psychology of Violence*. 2013; 4:323–339.
- Johnson MP, Leone JM. The differential effects of intimate terrorism and situational couple violence: findings from the national violence against women survey. *J Fam Issues*. 2005; 26(3):322–349.
- Kerig PK. Introduction: for better or worse: intimate relationships as sources of risk or resilience for girls' delinquency. *J Res Adolesc*. 2014; 24(1):1–11.

- Malamuth NM, Linz D, Heavey CL, Barnes G, Acker M. Using the confluence model of sexual aggression to predict men's conflict with women: a 10-year follow-up study. *J Pers Soc Psychol*. 1995; 69:353–369. [PubMed: 7643309]
- Markham CM, Peliskin MF, Addy RC, Baumler ER, Tortolero SR. Patterns of oral, vaginal, and anal sexual intercourse in an urban seventh grade population. *J Sch Health*. 2009; 79:193–200. [PubMed: 19292852]
- McDonald CC, Deatrick JA, Kassam-Adams N, Richmond TS. Community violence exposure and positive youth development in urban youth. *J Community Health*. 2011; 36:925–932. [PubMed: 21461763]
- Niolon PH, Vivolo-Kantor AM, Latzman NE, Valle LA, Kuoh H, Burton T, Taylor BG, Tharp AT. Prevalence of teen dating violence and co-occurring risk factors among middle school youth in high-risk urban communities. *J Adolesc Health*. 2015; 56(2 Suppl 2):S5–13.
- O'Leary DK, Slep AMS. Prevention of partner violence by focusing on behaviors of both young males and females. *Prev Sci*. 2012; 13:329–339. [PubMed: 21779924]
- Orpinas P, Hsieh HL, Song X, Holland K, Nahapetyan L. Trajectories of physical dating violence from middle to high school: association with relationship quality and acceptability of aggression. *J Youth Adolesc*. 2013; 42(4):551–565. [PubMed: 23233161]
- Reidy DE, Kearns MC, Houry D, Valle LA, Holland KM, Marshall KJ. Dating violence and injury among youth exposed to violence. *Pediatrics*. 2016; 137(2)
- Reidy DE, Holland KM, Cortina K, Ball B, Rosenbluth B. Evaluation of the Expect Respect Support Group Program: A Violence Prevention Strategy for Youth Exposed to Violence. *Preventive Medicine*. 2017; 100:235–242. [PubMed: 28502578]
- Reyes HL, Foshee VA, Niolon PH, Reidy DE, Hall JE. Gender role attitudes and male adolescent dating violence perpetration: normative beliefs as moderators. *J Youth Adolesc*. 2016; 45:350–360. [PubMed: 25831994]
- Rothman EF, Xuan Z. Trends in physical dating violence victimization among US high school students, 1999–2011. *J Sch Violence*. 2014; 13(3):277–290. [PubMed: 25143760]
- Schaeffer CM, Petras H, Ialongo N, et al. A comparison of girls' and boys' aggressive disruptive behavior trajectories across elementary school: prediction to young adult antisocial outcomes. *J Consult Clin Psychol*. 2006; 74(3):500–510. [PubMed: 16822107]
- Schwartz SJ, Côté JE, Arnett JJ. Identity and agency in emerging adulthood two developmental routes in the individualization process. *Youth Soc*. 2005; 37(2):201–229.
- Smith PH, White JW, Holland LJ. A longitudinal perspective on dating violence among adolescent and college-age women. *Am J Public Health*. 2003; 93:1104–1109. [PubMed: 12835193]
- Smith RM, Parrott DJ, Swartout KM, Teten-Tharp A. Deconstructing hegemonic masculinity: the roles of antifemininity, subordination to women, and sexual dominance in men's perpetration of sexual aggression. *Psychol Men Masculinity*. 2015; 16:160–169.
- Straus MA. Dominance and symmetry in partner violence by male and female university students in 32 nations. *Child Youth Serv Rev*. 2008; 30:252–275.
- Sumner SA, Mercy JA, Buluma R, Mwangi MW, Marcelin LH, Kheam T, Lea V, Brookmeyer K, Kress H, Hillis SD. Childhood sexual violence against boys: a study in 3 countries. *Pediatrics*. 2016; 137(5) e2 0153386 Epub ahead of print.
- Swahn MH, Bossarte RM. Assessing and quantifying high risk: comparing risky behaviors by youth in an urban, disadvantaged community with nationally representative youth. *Public Health Rep*. 2009:224–233. [PubMed: 19320364]
- Swahn MH, Simon TR, Arias I, Bossarte RM. Measuring sex differences in violence victimization and perpetration within date and same-sex peer relationships. *J Interpers Violence*. 2008; 23(8):1120–1138. [PubMed: 18319366]
- Tanner J, Davies S, O'Grady B. Whatever happened to yesterday's rebels? Longitudinal effects of youth delinquency on education and employment. *Soc Probl*. 1999; 46:250–274.
- Turner HA, Shattuck A, Finkelhor D, Hamby S. Polyvictimization and youth violence exposure across contexts. *J Adolesc Health*. 2016; 58(2):208–214. [PubMed: 26598060]

- Walsh K, Keyes KM, Koenen KC, Hasin D. Lifetime prevalence of gender-based violence in US women: associations with mood/anxiety and substance use disorders. *J Psychiatr Res.* 2015; 62:7–13. [PubMed: 25648384]
- Waterman AS. Identity development from adolescence to adulthood: an extension of theory and a review of research. *Dev Psychol.* 1982; 18:341–358.
- Wolfe DA, Wekerle C, Scott K, Straatman A, Grasley C, Reitzel-Jaffe D. Dating violence prevention with at-risk youth: a controlled outcome evaluation. *J Consult Clin Psychol.* 2003; 71:279–291. [PubMed: 12699022]

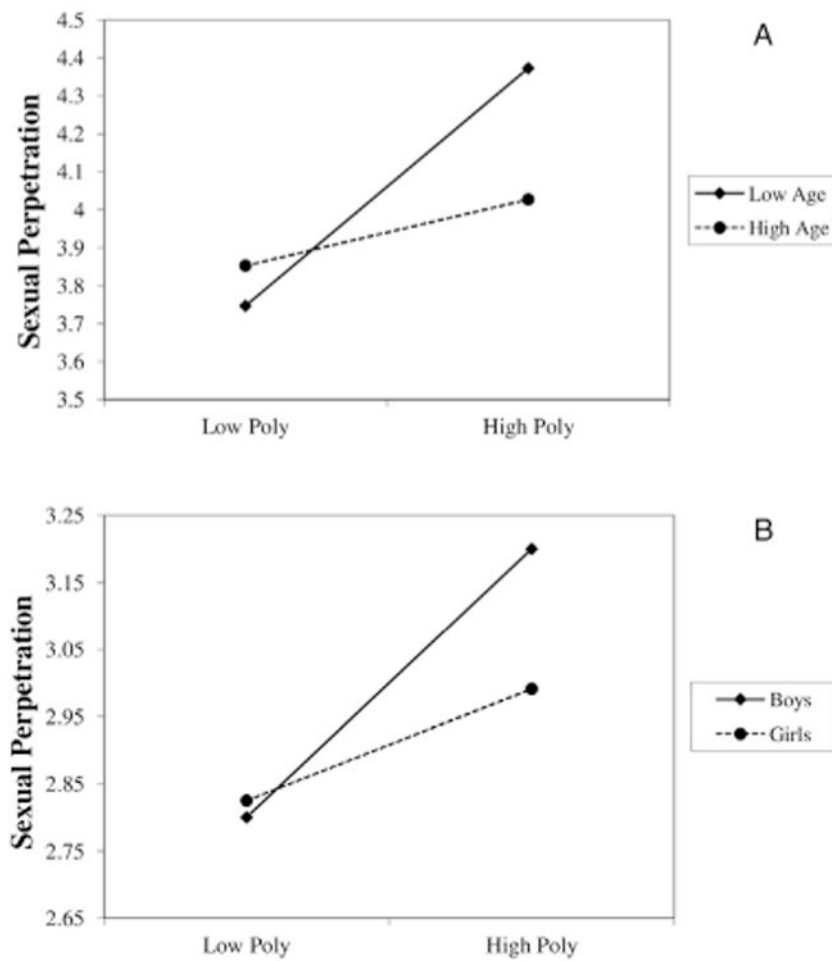


Fig. 1.

1A = The interactive effects of age and polyvictimization on sexual violence perpetration.

1B = The interactive effects of sex and polyvictimization on sexual violence perpetration.

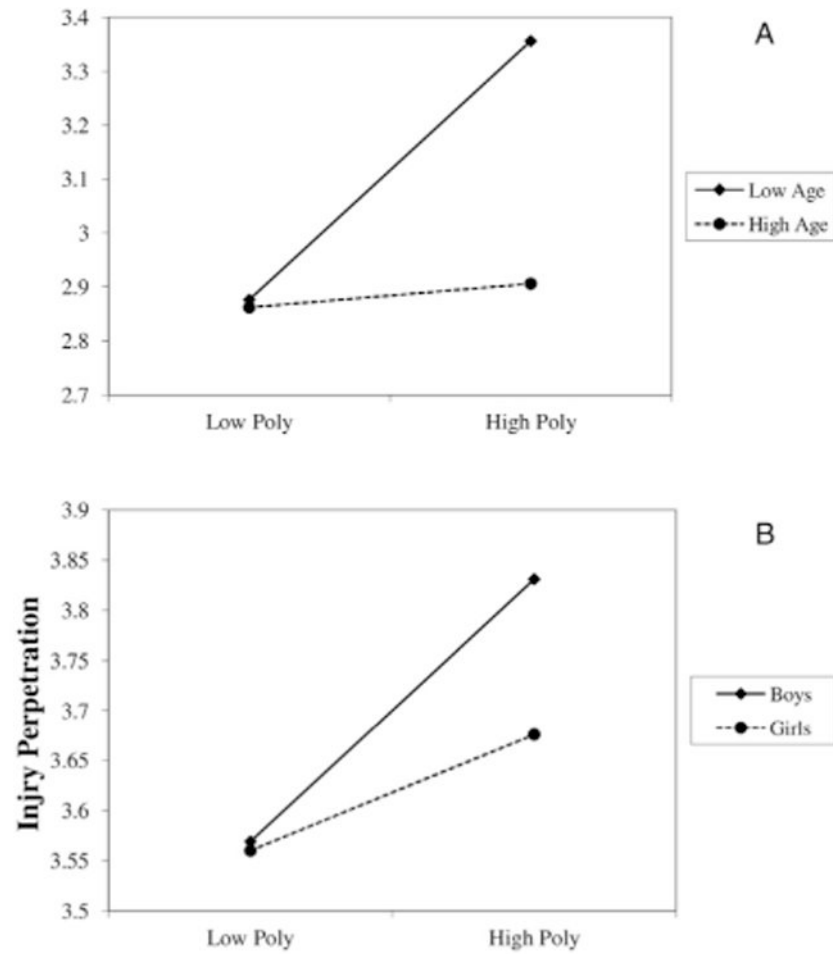


Fig. 2.

2A = The interactive effects of age and polyvictimization on injury perpetration. 2B = The interactive effects of sex and polyvictimization on injury perpetration.

Table 1

Demographic information for analytic sample of the 2577 adolescents with a history of dating in the year preceding survey.

	<i>N</i>	%
<i>Race/ethnicity</i>		
Hispanic	1112	43.2
African-American	562	21.8
White	631	24.5
Other	250	9.7
DNR	22	0.9
<i>Gender</i>		
Female	1335	51.8
Male	1242	48.2
<i>Grade level</i>		
Grade 7	687	26.7
Grade 9	756	29.3
Grade 11	579	22.5
Grade 12	547	21.2
DNR	8	0.3
<i>Violence exposure type</i>		
Intimate partner violence	931	36.1
Physical child abuse	659	25.6
Sexual violence	278	10.8
Community violence	1943	75.4
No violence exposure	397	15.4

Note. DNR = Did not respond. 43.7% of student endorsed 2 or more forms of violence exposure.

Table 2

Bivariate associations between predictor and criterion variables.

	Sexual perpetration		Sexual victimization		Injury perpetration		Injury victimization	
	r	p	r	p	r	p	r	p
Age	-.04	.01	.00	.89	-.06	.009	-.02	.23
Sex	-.09	.000	.00	.95	-.08	.001	-.04	.02
PV	.12	.002	.18	.000	.08	.000	.13	.000

Note. Negative coefficients for sex indicate that boys reported higher scores.

Table 3

Summary of moderated regression analyses.

Outcome	Predictor	β	S.E.	<i>p</i>
<i>Sexual perpetration</i>	Age	-.060	.037	.10
	Sex	-.092	.022	.000
	PV	.200	.044	.000
	Age * sex	.016	.032	.63
	Age * PV	-.113	.042	.01
	Sex * PV	-.117	.034	.000
	Age * sex * PV	-.117	.039	.39
<i>Sexual victimization</i>	Age	.022	.035	.52
	Sex	-.001	.021	.97
	PV	.170	.042	.000
	Age * sex	-.022	.030	.45
	Age * PV	.012	.041	.77
	Sex * PV	-.006	.039	.88
	Age * sex * PV	-.033	.035	.35
<i>Injury perpetration</i>	Age	-.116	.054	.03
	Sex	-.082	.024	.001
	PV	.131	.041	.001
	Age * sex	.062	.043	.15
	Age * PV	-.109	.043	.01
	Sex * PV	-.073	.039	.05
	Age * sex * PV	.050	.039	.20
<i>Injury victimization</i>	Age	-.052	.039	.18
	Sex	-.047	.022	.031
	PV	.170	.047	.000
	Age * sex	.023	.033	.48
	Age * PV	-.078	.049	.11
	Sex * PV	-.049	.048	.31
	Age * sex * PV	.030	.047	.52

Note. β = standardized regression coefficient; S.E. = standard error; *p* = significance value.

Negative coefficients for sex indicate that boys reported higher scores. Values in bold are statistically significant.